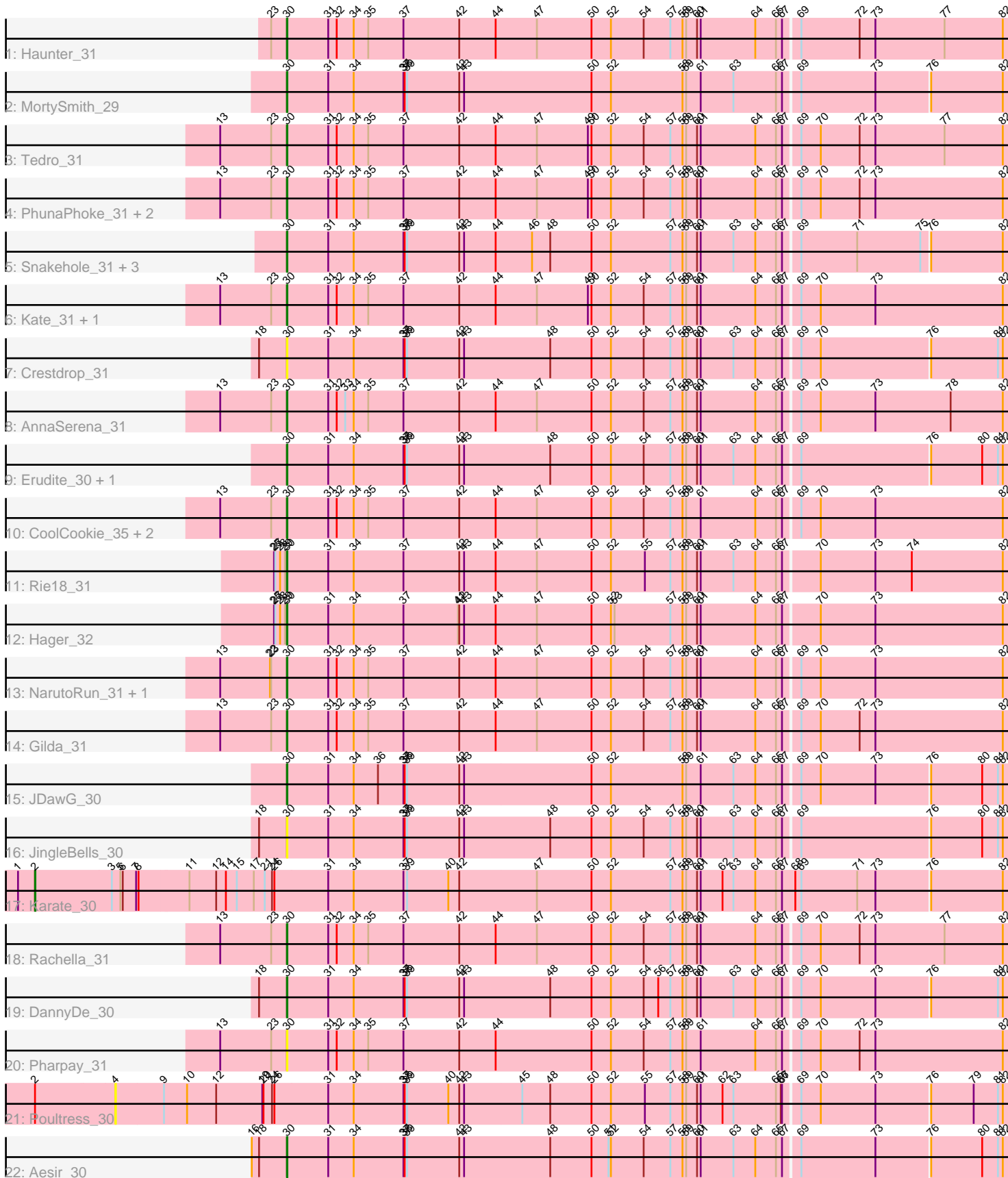# Pham 158063

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 158063 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158063 has 32 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Haunter_31
• Track 2 : MortySmith_29
• Track 3 : Tedro_31
• Track 4 : PhunaPhoke_31, Cybele_31, Neptune_31
• Track 5 : Snakehole_31, Chivey_30, Hiddenleaf_30, FreddieHg_30
• Track 6 : Kate_31, OverHedge_31
• Track 7 : Crestdrop_31
• Track 8 : AnnaSerena_31
• Track 9 : Erudite_30, Dauntless_31
• Track 10 : CoolCookie_35, Potty_31, Krampus_31
• Track 11 : Rie18_31
• Track 12 : Hager_32
• Track 13 : NarutoRun_31, Anakin_31
• Track 14 : Gilda_31
• Track 15 : JDawG_30
• Track 16 : JingleBells_30
• Track 17 : Karate_30
• Track 18 : Rachella_31
• Track 19 : DannyDe_30
• Track 20 : Pharpay_31
• Track 21 : Poultress_30
• Track 22 : Aesir_30

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 30, it was called in 23 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aesir_30, Anakin_31, AnnaSerena_31, Chivey_30, CoolCookie_35, Crestdrop_31, Cybele_31, DannyDe_30, Dauntless_31, Erudite_30, FreddieHg_30, Gilda_31, Hager_32, Haunter_31, Hiddenleaf_30, JDawG_30, JingleBells_30, Kate_31, Krampus_31, MortySmith_29, NarutoRun_31, Neptune_31, OverHedge_31, Pharpay_31, PhunaPhoke_31, Potty_31, Rachella_31, Rie18_31, Snakehole_31,

Tedro_31,

Genes that have the "Most Annotated" start but do not call it:
•

Genes that do not have the "Most Annotated" start:
• Karate_30, Poultress_30,

Summary by start number:

Start 2:
• Found in 2 of 32 (6.2%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Karate_30 (EF),

Start 4:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Poultress_30 (EF),

Start 30:
• Found in 30 of 32 (93.8%) of genes in pham
• Manual Annotations of this start: 23 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aesir_30 (EF), Anakin_31 (EF), AnnaSerena_31 (EF), Chivey_30 (EF), CoolCookie_35 (EF), Crestdrop_31 (EF), Cybele_31 (EF), DannyDe_30 (EF), Dauntless_31 (EF), Erudite_30 (EF), FreddieHg_30 (EF), Gilda_31 (EF), Hager_32 (EF), Haunter_31 (EF), Hiddenleaf_30 (EF), JDawG_30 (EF), JingleBells_30 (EF), Kate_31 (EF), Krampus_31 (EF), MortySmith_29 (EF), NarutoRun_31 (EF), Neptune_31 (EF), OverHedge_31 (EF), Pharpay_31 (EF), PhunaPhoke_31 (EF), Potty_31 (EF), Rachella_31 (EF), Rie18_31 (EF), Snakehole_31 (EF), Tedro_31 (EF),

Summary by clusters:

There is one cluster represented in this pham: EF

Info for manual annotations of cluster EF:
•Start number 2 was manually annotated 1 time for cluster EF.
•Start number 30 was manually annotated 23 times for cluster EF.

Gene Information:
Gene: Aesir_30 Start: 18424, Stop: 20193, Start Num: 30
Candidate Starts for Aesir_30:
(16, 18337), (18, 18355), (Start: 30 @18424 has 23 MA's), (31, 18526), (34, 18589), (37, 18712), (38, 18715), (39, 18721), (42, 18850), (43, 18862), (48, 19075), (50, 19177), (51, 19219), (52, 19225), (54, 19306), (57, 19372), (58, 19402), (59, 19411), (60, 19438), (61, 19447), (63, 19528), (64, 19582), (65, 19633), (67, 19648), (69, 19684), (73, 19867), (76, 19996), (80, 20122), (81, 20161), (82, 20173),

Gene: Anakin_31 Start: 18678, Stop: 20456, Start Num: 30
Candidate Starts for Anakin_31:
(13, 18513), (22, 18636), (23, 18639), (Start: 30 @18678 has 23 MA's), (31, 18780), (32, 18801), (34, 18843), (35, 18879), (37, 18966), (42, 19104), (44, 19194), (47, 19296), (50, 19431), (52, 19479), (54, 19560), (57, 19626), (58, 19656), (59, 19665), (60, 19692), (61, 19701), (64, 19836), (65, 19887), (67, 19902), (69, 19938), (70, 19986), (73, 20121), (82, 20436),

Gene: AnnaSerena_31 Start: 18687, Stop: 20465, Start Num: 30
Candidate Starts for AnnaSerena_31:
(13, 18522), (23, 18648), (Start: 30 @18687 has 23 MA's), (31, 18789), (32, 18810), (33, 18831), (34, 18852), (35, 18888), (37, 18975), (42, 19113), (44, 19203), (47, 19305), (50, 19440), (52, 19488), (54, 19569), (57, 19635), (58, 19665), (59, 19674), (60, 19701), (61, 19710), (64, 19845), (65, 19896), (67, 19911), (69, 19947), (70, 19995), (73, 20130), (78, 20316), (82, 20445),

Gene: Chivey_30 Start: 17840, Stop: 19609, Start Num: 30
Candidate Starts for Chivey_30:
(Start: 30 @17840 has 23 MA's), (31, 17942), (34, 18005), (37, 18128), (38, 18131), (39, 18137), (42, 18266), (43, 18278), (44, 18356), (46, 18446), (48, 18491), (50, 18593), (52, 18641), (57, 18788), (58, 18818), (59, 18827), (60, 18854), (61, 18863), (63, 18944), (64, 18998), (65, 19049), (67, 19064), (69, 19100), (71, 19238), (75, 19394), (76, 19412), (82, 19589),

Gene: CoolCookie_35 Start: 18685, Stop: 20463, Start Num: 30
Candidate Starts for CoolCookie_35:
(13, 18520), (23, 18646), (Start: 30 @18685 has 23 MA's), (31, 18787), (32, 18808), (34, 18850), (35, 18886), (37, 18973), (42, 19111), (44, 19201), (47, 19303), (50, 19438), (52, 19486), (54, 19567), (57, 19633), (58, 19663), (59, 19672), (61, 19708), (64, 19843), (65, 19894), (67, 19909), (69, 19945), (70, 19993), (73, 20128), (82, 20443),

Gene: Crestdrop_31 Start: 17749, Stop: 19518, Start Num: 30
Candidate Starts for Crestdrop_31:
(18, 17680), (Start: 30 @17749 has 23 MA's), (31, 17851), (34, 17914), (37, 18037), (38, 18040), (39, 18046), (42, 18175), (43, 18187), (48, 18400), (50, 18502), (52, 18550), (54, 18631), (57, 18697), (58, 18727), (59, 18736), (60, 18763), (61, 18772), (63, 18853), (64, 18907), (65, 18958), (67, 18973), (69, 19009), (70, 19057), (76, 19321), (81, 19486), (82, 19498),

Gene: Cybele_31 Start: 18655, Stop: 20433, Start Num: 30
Candidate Starts for Cybele_31:
(13, 18490), (23, 18616), (Start: 30 @18655 has 23 MA's), (31, 18757), (32, 18778), (34, 18820), (35, 18856), (37, 18943), (42, 19081), (44, 19171), (47, 19273), (49, 19399), (50, 19408), (52, 19456), (54, 19537), (57, 19603), (58, 19633), (59, 19642), (60, 19669), (61, 19678), (64, 19813), (65, 19864), (67, 19879), (69, 19915), (70, 19963), (72, 20059), (73, 20098), (82, 20413),

Gene: DannyDe_30 Start: 17832, Stop: 19601, Start Num: 30
Candidate Starts for DannyDe_30:
(18, 17763), (Start: 30 @17832 has 23 MA's), (31, 17934), (34, 17997), (37, 18120), (38, 18123), (39, 18129), (42, 18258), (43, 18270), (48, 18483), (50, 18585), (52, 18633), (54, 18714), (56, 18750), (57, 18780), (58, 18810), (59, 18819), (60, 18846), (61, 18855), (63, 18936), (64, 18990), (65, 19041), (67, 19056), (69, 19092), (70, 19140), (73, 19275), (76, 19404), (81, 19569), (82, 19581),

Gene: Dauntless_31 Start: 18392, Stop: 20161, Start Num: 30
Candidate Starts for Dauntless_31:

(Start: 30 @18392 has 23 MA's), (31, 18494), (34, 18557), (37, 18680), (38, 18683), (39, 18689), (42, 18818), (43, 18830), (48, 19043), (50, 19145), (52, 19193), (54, 19274), (57, 19340), (58, 19370), (59, 19379), (60, 19406), (61, 19415), (63, 19496), (64, 19550), (65, 19601), (67, 19616), (69, 19652), (76, 19964), (80, 20090), (81, 20129), (82, 20141),

Gene: Erudite_30 Start: 18392, Stop: 20161, Start Num: 30
Candidate Starts for Erudite_30:
(Start: 30 @18392 has 23 MA's), (31, 18494), (34, 18557), (37, 18680), (38, 18683), (39, 18689), (42, 18818), (43, 18830), (48, 19043), (50, 19145), (52, 19193), (54, 19274), (57, 19340), (58, 19370), (59, 19379), (60, 19406), (61, 19415), (63, 19496), (64, 19550), (65, 19601), (67, 19616), (69, 19652), (76, 19964), (80, 20090), (81, 20129), (82, 20141),

Gene: FreddieHg_30 Start: 17856, Stop: 19625, Start Num: 30
Candidate Starts for FreddieHg_30:
(Start: 30 @17856 has 23 MA's), (31, 17958), (34, 18021), (37, 18144), (38, 18147), (39, 18153), (42, 18282), (43, 18294), (44, 18372), (46, 18462), (48, 18507), (50, 18609), (52, 18657), (57, 18804), (58, 18834), (59, 18843), (60, 18870), (61, 18879), (63, 18960), (64, 19014), (65, 19065), (67, 19080), (69, 19116), (71, 19254), (75, 19410), (76, 19428), (82, 19605),

Gene: Gilda_31 Start: 18679, Stop: 20457, Start Num: 30
Candidate Starts for Gilda_31:
(13, 18514), (23, 18640), (Start: 30 @18679 has 23 MA's), (31, 18781), (32, 18802), (34, 18844), (35, 18880), (37, 18967), (42, 19105), (44, 19195), (47, 19297), (50, 19432), (52, 19480), (54, 19561), (57, 19627), (58, 19657), (59, 19666), (60, 19693), (61, 19702), (64, 19837), (65, 19888), (67, 19903), (69, 19939), (70, 19987), (72, 20083), (73, 20122), (82, 20437),

Gene: Hager_32 Start: 18239, Stop: 20017, Start Num: 30
Candidate Starts for Hager_32:
(25, 18209), (27, 18212), (28, 18224), (29, 18236), (Start: 30 @18239 has 23 MA's), (31, 18341), (34, 18404), (37, 18527), (41, 18662), (42, 18665), (43, 18677), (44, 18755), (47, 18857), (50, 18992), (52, 19040), (53, 19049), (57, 19187), (58, 19217), (59, 19226), (60, 19253), (61, 19262), (64, 19397), (65, 19448), (67, 19463), (70, 19547), (73, 19682), (82, 19997),

Gene: Haunter_31 Start: 18092, Stop: 19870, Start Num: 30
Candidate Starts for Haunter_31:
(23, 18053), (Start: 30 @18092 has 23 MA's), (31, 18194), (32, 18215), (34, 18257), (35, 18293), (37, 18380), (42, 18518), (44, 18608), (47, 18710), (50, 18845), (52, 18893), (54, 18974), (57, 19040), (58, 19070), (59, 19079), (60, 19106), (61, 19115), (64, 19250), (65, 19301), (67, 19316), (69, 19352), (72, 19496), (73, 19535), (77, 19706), (82, 19850),

Gene: Hiddenleaf_30 Start: 17840, Stop: 19609, Start Num: 30
Candidate Starts for Hiddenleaf_30:
(Start: 30 @17840 has 23 MA's), (31, 17942), (34, 18005), (37, 18128), (38, 18131), (39, 18137), (42, 18266), (43, 18278), (44, 18356), (46, 18446), (48, 18491), (50, 18593), (52, 18641), (57, 18788), (58, 18818), (59, 18827), (60, 18854), (61, 18863), (63, 18944), (64, 18998), (65, 19049), (67, 19064), (69, 19100), (71, 19238), (75, 19394), (76, 19412), (82, 19589),

Gene: JDawG_30 Start: 18422, Stop: 20188, Start Num: 30
Candidate Starts for JDawG_30:
(Start: 30 @18422 has 23 MA's), (31, 18524), (34, 18587), (36, 18647), (37, 18710), (38, 18713), (39, 18719), (42, 18848), (43, 18860), (50, 19172), (52, 19220), (58, 19397), (59, 19406), (61, 19442), (63, 19523), (64, 19577), (65, 19628), (67, 19643), (69, 19679), (70, 19727), (73, 19862), (76, 19991), (80, 20117), (81, 20156), (82, 20168),

Gene: JingleBells_30 Start: 17956, Stop: 19725, Start Num: 30
Candidate Starts for JingleBells_30:
(18, 17887), (Start: 30 @17956 has 23 MA's), (31, 18058), (34, 18121), (37, 18244), (38, 18247), (39, 18253), (42, 18382), (43, 18394), (48, 18607), (50, 18709), (52, 18757), (54, 18838), (57, 18904), (58, 18934), (59, 18943), (60, 18970), (61, 18979), (63, 19060), (64, 19114), (65, 19165), (67, 19180), (69, 19216), (76, 19528), (80, 19654), (81, 19693), (82, 19705),

Gene: Karate_30 Start: 18091, Stop: 20484, Start Num: 2
Candidate Starts for Karate_30:
(1, 18049), (Start: 2 @18091 has 1 MA's), (3, 18280), (5, 18301), (6, 18307), (7, 18340), (8, 18346), (11, 18466), (12, 18532), (14, 18556), (15, 18583), (17, 18625), (21, 18652), (24, 18670), (26, 18676), (31, 18808), (34, 18871), (37, 18994), (39, 19003), (40, 19105), (42, 19132), (47, 19321), (50, 19456), (52, 19504), (57, 19651), (58, 19681), (59, 19690), (60, 19717), (61, 19726), (62, 19780), (63, 19807), (64, 19861), (65, 19912), (67, 19927), (68, 19960), (69, 19975), (71, 20113), (73, 20158), (76, 20287), (82, 20464),

Gene: Kate_31 Start: 18687, Stop: 20465, Start Num: 30
Candidate Starts for Kate_31:
(13, 18522), (23, 18648), (Start: 30 @18687 has 23 MA's), (31, 18789), (32, 18810), (34, 18852), (35, 18888), (37, 18975), (42, 19113), (44, 19203), (47, 19305), (49, 19431), (50, 19440), (52, 19488), (54, 19569), (57, 19635), (58, 19665), (59, 19674), (60, 19701), (61, 19710), (64, 19845), (65, 19896), (67, 19911), (69, 19947), (70, 19995), (73, 20130), (82, 20445),

Gene: Krampus_31 Start: 18685, Stop: 20463, Start Num: 30
Candidate Starts for Krampus_31:
(13, 18520), (23, 18646), (Start: 30 @18685 has 23 MA's), (31, 18787), (32, 18808), (34, 18850), (35, 18886), (37, 18973), (42, 19111), (44, 19201), (47, 19303), (50, 19438), (52, 19486), (54, 19567), (57, 19633), (58, 19663), (59, 19672), (61, 19708), (64, 19843), (65, 19894), (67, 19909), (69, 19945), (70, 19993), (73, 20128), (82, 20443),

Gene: MortySmith_29 Start: 17815, Stop: 19581, Start Num: 30
Candidate Starts for MortySmith_29:
(Start: 30 @17815 has 23 MA's), (31, 17917), (34, 17980), (37, 18103), (38, 18106), (39, 18112), (42, 18241), (43, 18253), (50, 18565), (52, 18613), (58, 18790), (59, 18799), (61, 18835), (63, 18916), (65, 19021), (67, 19036), (69, 19072), (73, 19255), (76, 19384), (82, 19561),

Gene: NarutoRun_31 Start: 18678, Stop: 20456, Start Num: 30
Candidate Starts for NarutoRun_31:
(13, 18513), (22, 18636), (23, 18639), (Start: 30 @18678 has 23 MA's), (31, 18780), (32, 18801), (34, 18843), (35, 18879), (37, 18966), (42, 19104), (44, 19194), (47, 19296), (50, 19431), (52, 19479), (54, 19560), (57, 19626), (58, 19656), (59, 19665), (60, 19692), (61, 19701), (64, 19836), (65, 19887), (67, 19902), (69, 19938), (70, 19986), (73, 20121), (82, 20436),

Gene: Neptune_31 Start: 18655, Stop: 20433, Start Num: 30
Candidate Starts for Neptune_31:
(13, 18490), (23, 18616), (Start: 30 @18655 has 23 MA's), (31, 18757), (32, 18778), (34, 18820), (35, 18856), (37, 18943), (42, 19081), (44, 19171), (47, 19273), (49, 19399), (50, 19408), (52, 19456), (54, 19537), (57, 19603), (58, 19633), (59, 19642), (60, 19669), (61, 19678), (64, 19813), (65, 19864), (67, 19879), (69, 19915), (70, 19963), (72, 20059), (73, 20098), (82, 20413),

Gene: OverHedge_31 Start: 18645, Stop: 20423, Start Num: 30
Candidate Starts for OverHedge_31:

(13, 18480), (23, 18606), (Start: 30 @18645 has 23 MA's), (31, 18747), (32, 18768), (34, 18810), (35, 18846), (37, 18933), (42, 19071), (44, 19161), (47, 19263), (49, 19389), (50, 19398), (52, 19446), (54, 19527), (57, 19593), (58, 19623), (59, 19632), (60, 19659), (61, 19668), (64, 19803), (65, 19854), (67, 19869), (69, 19905), (70, 19953), (73, 20088), (82, 20403),

Gene: Pharpay_31 Start: 18700, Stop: 20478, Start Num: 30
Candidate Starts for Pharpay_31:
(13, 18535), (23, 18661), (Start: 30 @18700 has 23 MA's), (31, 18802), (32, 18823), (34, 18865), (35, 18901), (37, 18988), (42, 19126), (44, 19216), (50, 19453), (52, 19501), (54, 19582), (57, 19648), (58, 19678), (59, 19687), (61, 19723), (64, 19858), (65, 19909), (67, 19924), (69, 19960), (70, 20008), (72, 20104), (73, 20143), (82, 20458),

Gene: PhunaPhoke_31 Start: 18673, Stop: 20451, Start Num: 30
Candidate Starts for PhunaPhoke_31:
(13, 18508), (23, 18634), (Start: 30 @18673 has 23 MA's), (31, 18775), (32, 18796), (34, 18838), (35, 18874), (37, 18961), (42, 19099), (44, 19189), (47, 19291), (49, 19417), (50, 19426), (52, 19474), (54, 19555), (57, 19621), (58, 19651), (59, 19660), (60, 19687), (61, 19696), (64, 19831), (65, 19882), (67, 19897), (69, 19933), (70, 19981), (72, 20077), (73, 20116), (82, 20431),

Gene: Potty_31 Start: 18678, Stop: 20456, Start Num: 30
Candidate Starts for Potty_31:
(13, 18513), (23, 18639), (Start: 30 @18678 has 23 MA's), (31, 18780), (32, 18801), (34, 18843), (35, 18879), (37, 18966), (42, 19104), (44, 19194), (47, 19296), (50, 19431), (52, 19479), (54, 19560), (57, 19626), (58, 19656), (59, 19665), (61, 19701), (64, 19836), (65, 19887), (67, 19902), (69, 19938), (70, 19986), (73, 20121), (82, 20436),

Gene: Poultress_30 Start: 18637, Stop: 20820, Start Num: 4
Candidate Starts for Poultress_30:
(Start: 2 @18442 has 1 MA's), (4, 18637), (9, 18751), (10, 18808), (12, 18880), (19, 18994), (20, 18997), (24, 19018), (26, 19024), (31, 19156), (34, 19219), (37, 19342), (38, 19345), (39, 19351), (40, 19453), (42, 19480), (43, 19492), (45, 19633), (48, 19702), (50, 19804), (52, 19852), (55, 19936), (57, 19999), (58, 20029), (59, 20038), (60, 20065), (61, 20074), (62, 20128), (63, 20155), (65, 20260), (66, 20272), (67, 20275), (69, 20311), (70, 20359), (73, 20494), (76, 20623), (79, 20728), (81, 20788), (82, 20800),

Gene: Rachella_31 Start: 18681, Stop: 20459, Start Num: 30
Candidate Starts for Rachella_31:
(13, 18516), (23, 18642), (Start: 30 @18681 has 23 MA's), (31, 18783), (32, 18804), (34, 18846), (35, 18882), (37, 18969), (42, 19107), (44, 19197), (47, 19299), (50, 19434), (52, 19482), (54, 19563), (57, 19629), (58, 19659), (59, 19668), (60, 19695), (61, 19704), (64, 19839), (65, 19890), (67, 19905), (69, 19941), (70, 19989), (72, 20085), (73, 20124), (77, 20295), (82, 20439),

Gene: Rie18_31 Start: 18192, Stop: 19970, Start Num: 30
Candidate Starts for Rie18_31:
(25, 18162), (27, 18165), (28, 18177), (29, 18189), (Start: 30 @18192 has 23 MA's), (31, 18294), (34, 18357), (37, 18480), (42, 18618), (43, 18630), (44, 18708), (47, 18810), (50, 18945), (52, 18993), (55, 19077), (57, 19140), (58, 19170), (59, 19179), (60, 19206), (61, 19215), (63, 19296), (64, 19350), (65, 19401), (67, 19416), (70, 19500), (73, 19635), (74, 19725), (82, 19950),

Gene: Snakehole_31 Start: 17937, Stop: 19706, Start Num: 30
Candidate Starts for Snakehole_31:
(Start: 30 @17937 has 23 MA's), (31, 18039), (34, 18102), (37, 18225), (38, 18228), (39, 18234), (42, 18363), (43, 18375), (44, 18453), (46, 18543), (48, 18588), (50, 18690), (52, 18738), (57, 18885), (58,

18915), (59, 18924), (60, 18951), (61, 18960), (63, 19041), (64, 19095), (65, 19146), (67, 19161), (69, 19197), (71, 19335), (75, 19491), (76, 19509), (82, 19686),

Gene: Tedro_31 Start: 18151, Stop: 19929, Start Num: 30
Candidate Starts for Tedro_31:
(13, 17986), (23, 18112), (Start: 30 @18151 has 23 MA's), (31, 18253), (32, 18274), (34, 18316), (35, 18352), (37, 18439), (42, 18577), (44, 18667), (47, 18769), (49, 18895), (50, 18904), (52, 18952), (54, 19033), (57, 19099), (58, 19129), (59, 19138), (60, 19165), (61, 19174), (64, 19309), (65, 19360), (67, 19375), (69, 19411), (70, 19459), (72, 19555), (73, 19594), (77, 19765), (82, 19909),